

### REMARKS

Claims 1, 3, 7, 11, 44, 46, 50, 54, 56, 58, 62 and 66 have been amended to further clarify the invention. No new matter is added by these amendments. Claims 1-3, 5-12 and 36-67 remain pending.

Claims 1-3, 5-12, and 36-67 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for reason number 3 recited in the preceding Office Action; and claims 1-2, 7-10, 36-45, 50-53, 56-57, and 62-65 stand rejected under § 103 over Mokrosz et al., *J. Med. Chem.* **1992**, 35, 2369-2374 ("Mokrosz"). Both rejections were asserted in the preceding Office Action. The other rejections asserted in the preceding Office Action have been withdrawn by the Office.

The presently asserted rejections are addressed below.

#### Rejection Under 35 U.S.C. § 112, Second Paragraph

Claims 1-3, 5-12, and 36-67 continue to stand rejected as being indefinite, with the Office asserting that the recited test conditions are incomplete because the nature of the cell line used in the assay is incomplete as well as the type of radioligand employed. The Office cites Blengau et al. (Archives of Insect Biochemistry and Physiology 48:13-38 (2001)) as showing variation of Ki values when employing various cell lines and/or radioligands.

Applicants have amended the claims to indicate the radioligand that is used in the assay.

Regarding the nature of the cell line, it is respectfully submitted that the Blengau reference does not support the Office's position. In particular, Table 3 of that reference shows that the results obtained using CHO cells differ from the results obtained using COS cells, but not that there is variability among different types of COS cells. Applicants submit that the amended claims are not indefinite. Withdrawal of the § 112 rejection is respectfully requested.

Rejection Under 35 U.S.C. § 103

Claims 1-2, 7-10, 36-45, 50-53, 56-57, and 62-65 stand rejected under § 103(a) as being unpatentable over Mokrosz.

Mokrosz is directed to exploring the effect of substitutions at the 4-position of 1-aryl piperazines on 5-HT<sub>1A</sub> activity. Mokrosz, abstract. In this reference, the authors report that the best activity is obtained with hexyl substituents on the piperazine, with decreasing activity as the size of the substituent is increased or decreased. See Table 1. The benzyl group (compound 23) has relatively poor activity ( $K_i = 166$  nM) as compared to hexyl (2.67 nM). In view of this disclosure, that variation from hexyl results in reduced activity, a person of ordinary skill in the art would not be

motivated to add additional substituents to the benzyl. Based on the reference, even a methyl group on benzyl would be expected to decrease activity. The claims, therefore, are not obvious in view of the reference. Applicants request that the 35 U.S.C. 103(a) rejection based on Mokrosz be withdrawn.


Applicants respectfully submit that all requirements of Title 35 of the United States Code have been met. Allowance of the claims and passage of the case to issue are therefore respectfully solicited.

Should the Examiner believe a discussion of this matter would be helpful, the Examiner is invited to telephone the undersigned at (312) 913-0001.

Respectfully submitted,

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